# **Department of the Navy**

# **Civilian Career Path Guide**

for Management of Technology, Information, and Computer and Information Systems Communications **Knowledge** Tele. Engineering Volume I March 2001 Information Management Information Assurance Knowledge Management

#### DEPARTMENT OF THE NAVY

CHIEF INFORMATION OFFICER 1000 NAVY PENTAGON WASHINGTON, DC 20350-1000

22 Mar 01

#### MEMORANDUM FOR DISTRIBUTION

Subj: DEPARTMENT OF THE NAVY CIVILIAN CAREER PATH GUIDE

Ref: (a) DONCIO Memorandum, dated 16 August 2000, Subj: Department of the Navy Civilian Career Path Guide

Encl: (1) DON Civilian Career Path Guide, Vols I & II

(2) Highlighted changes from draft CPG of 16 Aug 2000

(3) Changes to DON Career Path Guide

Web engineering, the digital marketplace, intranets, portals, and strategic partnerships may all be the stock and trade for today's transformational organization, but sustained success still comes down to attracting, developing, and retaining talented people. The development of this career path guide has given the Department of Navy (DON) a chance to reflect upon the core competencies of the new civilian information professional, to ensure there is a plan compliant with OPM guidelines to evolve the workforce in these new directions.

Our approved version of the plan is at enclosure (1), DON Civilian Career Path Guide (CPG) for Management of Technology, Information, and Knowledge. The CPG offers guidance in career paths for the civilian Information Technology (IT), Information Management (IM), and Knowledge Management (KM) workforce. Job roles, competencies, learning objectives, and more are outlined in the two-volume set. For an electronic version see: <a href="http://www.doncio.navy.mil/focusareas/workforce/index.html">http://www.doncio.navy.mil/focusareas/workforce/index.html</a>; select Career Development. Enclosure (2) highlights changes made from the draft released August 2000, and enclosure (3) is a form for recommending changes to the DON CPG, that will be implemented in future updates.

I am proud to distribute this first DON civilian CPG that will help to increase employee skill levels by identifying competency requirements and offering some suggested professional training and developmental opportunities. The DON will shape a workforce qualified to fill core IT, IM, and KM positions, and continue to build a learning organization. My point of contact is Mrs. Karen Danis, who can be reached at (703) 602-6729 or via email at Danis.Karen@hq.navy.mil.

D. E. Porter

Distribution: (see next page)

# Subj: DEPARTMENT OF THE NAVY CIVILIAN CAREER PATH GUIDE

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# Acknowledgments

The Department of the Navy (DON) Chief Information Officer (CIO) would like to thank the members of the DON Information Management/Information Technology (IM/IT) Workforce Integrated Product Team (IPT) for their assistance in developing the DON IM/IT Career Path Guide.

The DON CIO would like to specifically recognize the following individuals for their contribution:

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# Message from the DON CIO



Internet changes everything. We all have heard that declarative statement. I don't intend to debate its validity, but simply recognize that it is still in the process of revolutionizing the way commercial enterprises, government, individuals, and much of the world conduct their business. Learning and our concept of careers are most certainly marked for change in this new economy. Web engineering, digital marketplaces, intranets, portals, sophisticated database architectures, and strategic partnerships may all be the stock and trade for today's transformational organization, but sustained success still comes down to attracting, developing, and retaining talented people.

There is a "war for talent" currently underway across the country, particularly for information technology professionals. By some estimates, as many as one million more information workers will be needed in the

It Later

next six to eight years. Against this backdrop, the government and the Department must compete to train, retrain, and retain its people. As this war wages, the Departments of Defense and Navy have embraced privatization and outsourcing as methods to streamline operations, expecting to improve both performance and economic results. These initiatives have given us pause to reflect upon the core competencies of the new civilian information professional and to ensure that we have a purposeful plan to evolve the workforce in these new directions. It is my sincere hope that this guide will provide a foundation toward achieving that end.

Many dedicated people who really care about the quality and reputation of the Department's civilian workforce contributed to produce this guide. All of them are supervisors and practitioners drawn from the line management organization. Their collective wisdom will serve you and the Department well as we embark on the Knowledge Superiority journey of the new millennium.

Daniel E. Porter

## Introduction

### **Background**

As the DON CIO mentioned in his opening message, there is a "war for talent" currently underway across the country, particularly for information technology professionals. With the enactment of the Clinger-Cohen Act, legislation was introduced which requires the DON to build Information Management/Information Technology (IM/IT) competencies to shape the workforce of the future. Success in IT management is people dependent. The magnitude of the challenges that face industry and government agencies in implementing IT reform demands more skilled workers than currently exist. This is a national problem, industry- and government-wide. Training and education are essential at all levels to develop the skills needed to acquire, evaluate, design, develop, integrate, and oversee highly complex information systems. Strategies to recruit, train, and retain the best and the brightest must be designed and implemented. The DON Civilian Knowledge Management/Information Management/Information Technology (KM/IM/IT) Career Path Guide (CPG) is intended to be a major foundation of this strategy.

The CPG also addresses the issue of outsourcing government positions. While it is inevitable that many future IT-related jobs will be better suited to the private sector, the DON wants to ensure that it maintains a core of dedicated civil servants skilled in the various IT disciplines important to the DON. The CPG will help ensure that employees develop into managers, supervisors and/or executives capable of handling the future business of the DON.

Finally, with the advances in technology that the US Government, and consequently the DON, is adopting into their business processes (such as the Navy Marine Corps Intranet), it is imperative that the DON has a workforce able to cope with the new technologies. The combined set of KM/IM/IT and professional competencies outlined in this CPG provide guidance to employees in meeting the continuing challenges of technological change.

While this guide is a living document designed to be easily updated, it will be supported by an on-line version that will contain tools and resources for career planning. Please see the Workforce section of the DON CIO website at http://www.don-imit.navy.mil for more information.

#### What's in it for Me?

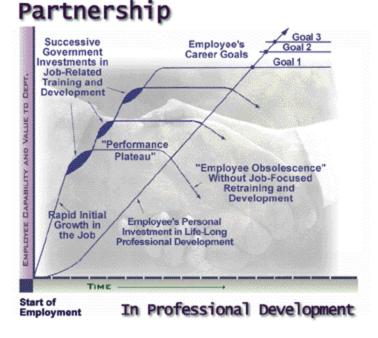
Times are changing. Change often brings about uncertainty, which can be very uncomfortable. However, being prepared for change can help make coping easier. This CPG is a tool to help the KM/IM/IT workforce prepare for future careers by:

- ❖ Framing meaningful and realistic career and life goals and translating them into personal career and life plans;
- Identifying unique work styles and preferences;
- ❖ Looking beyond job descriptions to identify existing skills and competencies that can be applied in future work assignments while identifying new skills that may be needed to adapt to new directions in the DON; and
- ❖ Helping make informed decisions about future job assignments.

Perhaps even more important, however, is the opportunity for the DON to show that it really does care about the KM/IM/IT workforce in these new and uncertain times, and to demonstrate its concern by giving something back.

Career development requires a partnership between the employee and the organization. While the employee is ultimately responsible for his own development, the organization plays a major role in providing the appropriate jobrelated training and development to help employees reach professional goals.

This relationship is illustrated in the figure to the right. Without a partnership between the organization and employee to ensure that investments in jobrelated training and development are provided at the appropriate times in an employee's career, the employee runs the risk of becoming obsolete. While it is incumbent on the employee to make a personal



investment in life-long professional development, the organization must also make an investment in terms of job-related training and development. This helps the employee attain ever increasing capabilities while building her value within the organization.

#### DON IM/IT Strategic Plan

The DON IM/IT Strategic Plan brings a collective vision of the future into clearer focus and communicates the DON's commitment to putting information to work for our Sailors, Marines, and Civilians. The IM/IT Strategic Plan outlines nine specific goals, listed below. Each member of the DON is encouraged to factor these goals and objectives into programmatic and operational plans. This will allow everyone to realize the revolution in military and business affairs.

- 1. Provide an information technology infrastructure that will ensure information superiority and connectivity throughout the Department of the Navy.
- 2. Reengineer warfighting and core business processes in parallel with technology infusion to maximize effectiveness and efficiency.
- 3. Maximize the value and manage the risk associated with DON information technology investments.
- 4. Implement strategies that facilitate the creation and sharing of knowledge to enable effective and agile decision-making.
- 5. Exploit emerging information technologies to achieve breakthrough performance.
- 6. Ensure the DON's information resources are secure and protected.
- 7. Resolve Y2K issues to ensure a smooth transition into the next millennium.

- 8. Build IM/IT competencies to shape the workforce of the future.
- 9. Foster and incentivize a technology-enabled and information-rich culture.

#### KM/IM/IT Workforce Strategic Vision

The CPG will provide the foundation to **Build IM/IT competencies to shape the workforce of the future**<sup>1</sup>. It also offers guidance to the newest community, our Knowledge Management (KM) practitioners. Through their expertise the DON will establish KM capabilities for all to employ in pursuit of Knowledge Superiority. The DON KM/IM/IT vision for the future will require a skilled and highly competent workforce. Five main points articulate this vision:

- ❖ Develop a highly-trained and competent DON KM/IM/IT workforce.
- ❖ Recruit and retain qualified KM/IM/IT personnel.
- ❖ Increase efficiency and skill levels of the DON KM/IM/IT workforce through superior technical and professional training and development opportunities.
- Produce employees who are qualified to fill high-grade positions.
- Build a high-performance learning organization.

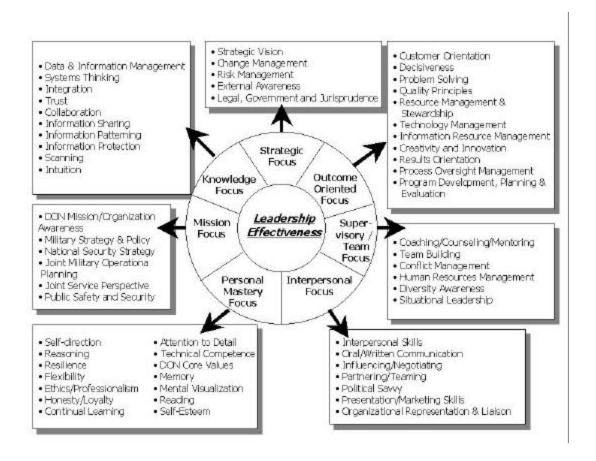
#### Qualities of the KM/IM/IT Workforce

The DON KM/IM/IT workforce must possess an awareness of both the external and internal environment. The DON has identified the following focus areas that must be developed by the KM/IM/IT workforce of the future; these are called **Career Foundational Competencies**:

- Strategic Focus
- Outcome Oriented Focus
- Supervisory and Team Focus
- Interpersonal Focus
- Mission Focus
- Personal Mastery Focus
- Knowledge Focus

While the DON IM/IT Strategic Plan focuses on Information Management/Information Technology, this guide includes

While no employee may fully develop all these skills, it is important that each focuses on as many as possible and continues to evolve and grow. The areas feature a number of characteristics that are all inherent in leadership effectiveness, as illustrated in the figure below:



#### Core Values

The DON KM/IM/IT workforce commits to achieving the overall workforce strategic vision by:

- ❖ Maximizing the value of IT investments.
- Ensuring the work performed is aligned with the strategic objectives of our organization and the DON.
- **\*** Embracing industry and government best practices for recruiting and retention.
- Valuing our KM/IM/IT workforce.
- Recruiting and retaining specifically to fill our core KM/IM/IT functions.

#### Objective of the CPG

This CPG is a tool for determining the career options, education and experience opportunities, and competency requirements of DON KM/IM/IT employees. It provides guidance for each KM/IM/IT field (career area) in the DON workforce. Specifically, the CPG can be used in developing a **Career Progression Plan** (CPP). The CPP identifies the career goal, competency requirements and education, training and experience opportunities that are formalized into an execution plan tailored to the individual. The CPP, in turn, aids in the development of an Individual Development Plan (IDP<sup>2</sup>).

The ultimate goal of the CPG is to develop a highly competent DON KM/IM/IT workforce. The CPG promotes this goal by:

- 1. Providing employees with a comprehensive list of competencies needed for performing major tasks in the KM/IM/IT occupations.
- 2. Providing learning objectives that are established standards of performance and accountability.
- 3. Providing employees and their supervisors with a reference to assist in determining appropriate training and to prepare employees for more responsible and challenging positions.
- 4. Assisting supervisors in making effective use of scarce training resources by identifying critical competencies, training opportunities and certifications so that employees can attend the appropriate courses at the appropriate time, while gaining useful on-the-job experience.
- 5. Enabling employees to plan and sequence appropriate career training and development.
- 6. Developing and strengthening employees' professional qualifications and leadership abilities.

#### **Intended Audience**

The primary audience for this CPG is each individual DON KM/IM/IT employee. The CPG has been written because the DON recognizes the need for comprehensive career planning and management guidance in order to recruit for and retain our valuable KM/IM/IT workforce. It is the responsibility of each individual to take proactive steps in planning his career in the DON. Often, this requires a lot of work and can be daunting without assistance. But, in the long run, this hard work pays off. Think of this CPG as a tool that provides much of the career planning assistance an individual needs, and offers a "head start" in the career planning process.

#### A quick word to managers...

Although this CPG is written primarily for employees developing their careers, managers play a very important role and are thus strongly encouraged to read this guide. There are several steps employees take when using this CPG that require management assistance, guidance and answers. In addition, managers are essential in communicating the needs of the organization and the types of competencies needed by the organization in the future.

<sup>&</sup>lt;sup>2</sup> Listing of developmental activities on an IDP or CPP does not guarantee funding for the activity. However, it does aid in planning for such activities.

As such, this guide is also to be used by managers and mentors $^3$  in developing an employee's formal training plan. The CPG is most beneficial when it is shared between managers and

employees because it helps identify employees' career goals, assess current competencies, and outlines what may be required in target job roles.

The CPG is most beneficial when it is shared between the employee and the manager/mentor. Additionally, an individual may seek the assistance of a servicing Human Resources (HR) advisor or Employee Development Specialist in developing a formal training plan. individuals also play an important role in the career development process. Managers may be direct supervisors, and are helpful in assessing skills and job responsibilities. Although mentors are not common, they can be quite helpful. A mentor might be an individual who "takes you under his wing" to help with the various aspects of career development and is an invaluable source of knowledge. Because mentor inputs are so important, everyone is encouraged to get a manager and/or mentor involved early in the career development process.

#### A quick word to mentors...

Being a mentor doesn't necessarily mean a long term, time-consuming commitment. Here are five easy ways to help someone at work improve their skills:

- Make a copy of a magazine article that you think they would learn from and find interesting. It doesn't have to be related to your business -- it could be about sports, business, politics, or entertainment.
- Share information about a professional seminar or workshop coming up.
- Have lunch with someone you don't normally see outside of work; you can give them advice on work and/or personal matters.
- Be a mock audience for a presentation or a reader for a report.
- Teach someone a software package they don't know. If you don't have time, just teach them some short-cuts you know in a software package they use.

SOURCE: "101 Ways to Have a Great Day @ Work," Stephanie Goddard Davidson, 1998.

#### **Overview of the Career Development Process**

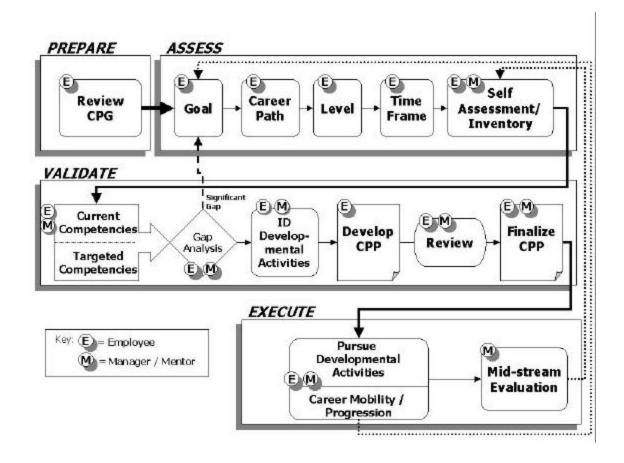
The DON KM/IM/IT career development process, illustrated on the next page, depicts all of the steps involved in career development, from the initial steps of formulating a career goal to drafting and implementing a CPP. Please refer to Appendix A for a checklist that summarizes each of these steps.

This section provides a high-level overview of the process, broken down into four phases:

- PREPARE
- ASSESS
- VALIDATE
- <u>EXECUTE</u>

Joining together the first letters of each phase to form the word "PAVE" may aid in remembering the process. Each phase is briefly introduced below, with much more detail provided in **The Career Development Process** section of the CPG. Sections that discusses the career development process will be shown with an 'E', 'M', or both in the left hand margin to suggest who is responsible for certain actions ('E' for employee or 'M' for manager/mentor).

<sup>&</sup>lt;sup>3</sup> Mentors should refer to the DON Mentoring Handbook (<u>www.donhr.navy.mil/menthb.pdf</u>). It contains information on the mentoring process, relationships and expectations.



#### **PREPARE**



In the **PREPARE** phase, the employee takes the requisite steps to ensure that the career planning process is made easier and more productive. The foundation step in this phase is to carefully read the CPG, as this is the guide for developing an individual plan. But an employee also needs to take time to collect information, organize thoughts, and set goals that will help in each stage of the career development process. When finished reviewing the CPG, she moves on to the next phase, **ASSESS**.

#### **ASSESS**



In the **ASSESS** phase, an employee evaluates where he wants to be in the future. This involves setting goals and time frames, determining the proper path to reach goals in a given time frame, and assessing current competencies. Part of this phase involves performing a self-assessment of current skills. Essentially, one needs a current "snapshot" of competencies to compare against those needed to accomplish a career goal. Forms provided in this CPG help with this process.





The employee performs the assessment in concert with her current manager, who can help ensure the validity of the results. When satisfied with the self-assessment, she moves on to the next phase, **VALIDATE**.

#### VALIDATE





The first step in the **VALIDATE** phase is to compare current and target competencies (with mentor/manager's input). Current competencies include knowledge, skills, abilities, and attributes that describe an employee now (collected in the **ASSESS** phase). Target competencies are future competencies needed to fulfill a career goal. These are based on the perspective of the DON organization (i.e., certain organizations will have specific needs), as well as what is understood about future job roles and skill requirements. This results in a "Gap Analysis" that compares the current and target competency information to reveal a possible gap. The gap identifies the competencies that need attainment to help fulfill a career goal. A significant gap may be an indication that a career goal is unrealistic and should be revisited. Managers can help determine this.





After completing the Gap Analysis, employees-working in conjunction with their managers/mentors-will outline a strategy identifying the learning and experience activities required to achieve the target competencies. This information is incorporated into a draft CPP that is subsequently reviewed and finalized. From here, employees proceed to the final phase, **EXECUTE**.

#### **EXECUTE**





The **EXECUTE** phase requires taking action on the steps outlined in the CPP. This may involve pursuing developmental opportunities and/or gaining job experience. On a larger scale, it may involve transitioning to another position, a different department, or a higher grade level, for example. Finally, employees and managers need to work together to evaluate progress on a regular basis. A Mid-Stream Evaluation ensures the employee takes the right track in achieving a stated career goal.

# **Career Areas and Job Roles**

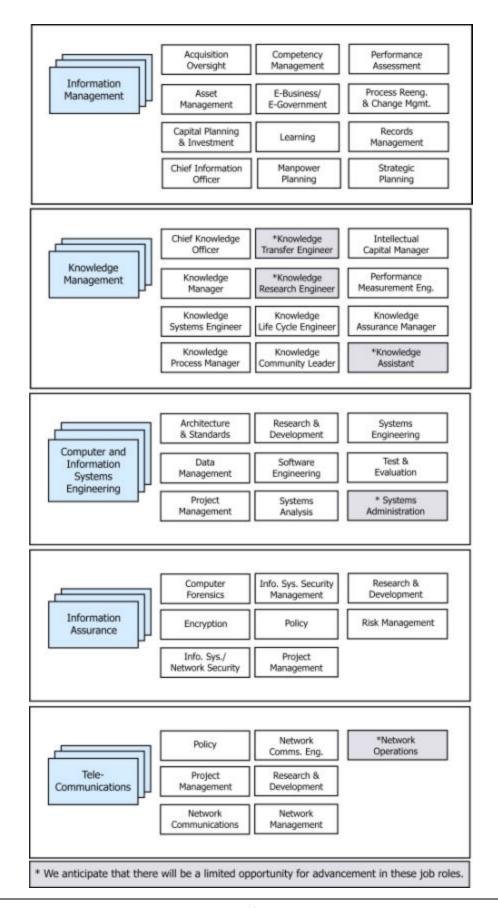
The job roles and competencies in this CPG are grouped into five general Career Areas:

- Information Management
- Knowledge Management
- Computer and Information Systems Engineering
- Information Assurance
- ❖ Telecommunications

Each of these Career Areas contains a varied set of job roles with associated competencies, learning objectives, intended performance levels, and proficiency requirements. These Career Areas are defined in the next section with a listing of the job roles in each area. The graphic on the following page summarizes the list of options within each career area. Detailed matrices which outline competencies, learning objectives, developmental activities, appropriate levels, and skills are provided in *Volume II: Career Areas*.

The jobs described in the CPG are found throughout much of the country, in all of the major DON claimants, and in a variety of occupational series. Some claimants and occupational series, however, are more "represented" in the KM/IM/IT workforce than others. Some geographic regions throughout the country will have more KM/IM/IT job opportunities than others, since the DON has bases and fleet concentration in specific places. Appendix F provides demographic data that may be of interest to current and prospective DON KM/IM/IT employees.

The job roles largely represent "**inherently governmental functions**." An inherently governmental function is one that is deemed to be so intimately related to the public interest as to mandate performance by government employees. These functions include those activities that require either the exercise of discretion in applying government authority, or the making of value judgments in making decisions for the government. Some job roles (shaded in the graphic on the next page) are not considered inherently governmental but provide foundational knowledge for oversight jobs, and thus are valuable to the civilian KM/IM/IT workforce.



### Information Management Career Area

<u>Definition</u>: The Information Management Career Area uses methods and procedures to plan for, acquire, and manage enterprise-wide information and information technology assets for the DON. This career area is often employed in the office of the CIO.

The Information Management Career Area includes the following job roles:

- ❖ Acquisition Oversight: oversees the acquisition of IM/IT products and services in accordance with the IM/IT architecture and established Federal, DoD and DON acquisition policy and guidance; plans and approves acquisition policy.
- ❖ Asset Management: applies tools and methods for the management of support functions for inventory, invoicing, and fixed enterprise IM/IT assets. This job may also include general ledger, accounts receivable, accounts payable, Enterprise Resource Planning (ERP), and enterprise licensing.
- ❖ Capital Planning and Investment: formulates policy and financial plans for the capital and operational costs associated with the IM/IT infrastructure to include the associated appropriations and IT budget as well as the oversight of financial obligations associated with IM/IT infrastructure procurements.
- Chief Information Officer (CIO): has overall responsibility for all aspects of IM/IT in an organization. Roles and responsibilities are generally derived from the Clinger-Cohen Act of 1996. Coordinates closely with the organization's leader and his/her direct reports, in order to align enterprise information resources with the mission.
- Competency Management: leverages human capital by strengthening the KM/IM/IT competencies of the enterprise. Oversees development of KM/IM/IT cognitive skills; establishes KM/IM/IT competency guidelines of the non-KM/IM/IT workforce; ensures the recruitment, retention, and training of the KM/IM/IT workforce needed to fulfill core capabilities; and, ensures the IM/IT infrastructure will support Distance Learning/Distributed Learning (DL) while expanding the use of DL technologies.
- ❖ eBusiness/eGovernment: develops and applies enterprise-wide electronic business and electronic government tools, policy, practices, standards and procedures; interfaces with DoD, Federal, National, and International planning and standards organizations for matters regarding eBusiness/eGovernment.
- ❖ Learning: formulates policy and requirements for building KM/IM/IT competencies in the organization's workforce, including KM/IM/IT professionals as well as the rest of the organization. For those areas requiring military expertise and/or current knowledge of military operations, designs and delivers the requisite education and training. Requires knowledge of the technology of learning, including Instructional Systems Design (ISD) and Advanced Distributed Learning (ADL).
- ❖ Manpower Planning: defines staffing and competency requirements for the core KM/IM/IT workforce necessary to plan, design, manage, operate, and support the IM/IT infrastructure to include the use of military, civilian, and contractor personnel

and related acquisition, competency development, and personnel management considerations.

- ❖ Performance Assessment: uses tools, methodologies, and procedures to measure or evaluate enterprise IM/IT performance.
- Process Reengineering and Change Management: uses tools, methodologies, and procedures to improve the enterprise IM/IT business processes, creating a business environment focused on teamwork and outcomes; improves organizational effectiveness, reengineering and reinventing processes, as well as adopting strategies to anticipate and manage change.
- ❖ Records Management: plans, directs, organizes, trains, promotes, and manages activities with respect to records creation, maintenance, and use to include document management.
- ❖ Strategic Planning: creates and updates policy and strategic plans governing the use of information resources across the enterprise and the enterprise-wide operational capability to access, process, transport, store, protect, and manage this information; establishes the benefits and justifies the planned expenditures in the IM/IT infrastructure and the required management and operational capabilities.

## Knowledge Management Career Area

<u>Definition</u>: The Knowledge Management Career Area creates a knowledge-centric organization (KCO). This is accomplished by providing the right information to the right decision maker at the right time, thus creating the right conditions for knowledge to be created. Employees in this new and evolving career area possess a commitment to put information to work for the DON enterprise.

The Knowledge Management Career Area includes the following job roles:

- Chief Knowledge Officer (CKO): manages the knowledge sharing process at the command level; leads efforts to move the organization to knowledge centricity; requires a dedication to KM principles, the ability to discuss the benefits of knowledge sharing, and the vision to ensure that KM initiatives are adopted by the organization; ensures that the best, relevant information for the area of practice is accessible to all personnel and implements the knowledge sharing strategy in alignment with command guidelines; champions cross-organizational communities of practice, forms relationships with HR, IT, librarians, and organizational learning; establishes incentive programs for knowledge sharing and re-use; fosters cultural change; defines roles, skill-set, and opportunities for knowledge workers and facilitates training and education of knowledge workers.
- ❖ Knowledge Manager (KM): works with the Chief Knowledge Officer to implement KM initiatives; manages KM efforts; looks across KM processes to capture tacit and explicit knowledge and often balances technology, information, processes, and individual and organizational learning within a culture of shared values. Creates ways to maintain a sustainable competitive advantage.

- Knowledge Systems Engineer (KSE): turns KM ideas into workable solutions by engineering appropriate knowledge sharing Internet/Intranet sites, rules based systems, portals, databases, etc. Requires intimate knowledge of the systems, architectures, technologies, standards, and protocols for KM. Ensures performance of the KCO is optimized through utilization of KM tools and systems thinking applications.
- ❖ Knowledge Process Manager (KPM): focuses on the organization's KM and content integration processes; manages the efforts of the Knowledge Transfer Engineer, Knowledge Research Engineer, and Knowledge Life-Cycle Engineer. Develops process models for optimal organizational effectiveness.
  - ➤ **Knowledge Transfer Engineer (KTE)**: captures and codifies tacit knowledge, making it available for re-use; connects people to one another to enable the transfer of tacit knowledge to explicit knowledge. This job role is not considered inherently governmental.
  - ➤ Knowledge Research Engineer (KRE): creates explicit knowledge from available resources and integrates content in KM systems into easily accessible knowledge for decision makers. While this job offers the opportunity for growth into managerial positions, this job role is not necessarily inherently governmental.
  - ➤ **Knowledge Life-Cycle Engineer (KLE)**: applies the rules and procedures that ensure the appropriate refresh and currency of information in a knowledge system; determines information birth and death for the KCO.
- Knowledge Community Leader (KCL): facilitates communities of practice across organizations to foster innovation, improved performance and collaboration; requires facilitation skills to ensure change initiatives are supported.
- ❖ Intellectual Capital Manager (ICM): develops the enterprise workforce; ensures the human capital aspects of KM are fully integrated; uses KM to increase the performance of the organization, the learning of the organization and identifies gaps in KM competencies.
- ❖ Performance Measurement Engineer (PME): measures and assesses the KCO model implementation and architecture. Performs analysis, develops a predictive model, shows potential impact of change, and provides implications for validation of KCO model.
- \* Knowledge Assurance Manager (KAM): ensures the assimilation of information and knowledge is protected from unauthorized access and/or disclosure.
- \* Knowledge Assistant (KA): understands organizational information needs; assists in data gathering activities; uses expert multimedia skills and Web tools to prepare and distribute organizational products/communications; analyzes and improves organizational workflow and communications. This job role is not considered inherently governmental.

# Computer and Information Systems Engineering Career Area

<u>Definition</u>: The Computer and Information Systems Engineering Career Area uses standardized tools and methods to design, develop, test, acquire, maintain, operate, and manage computer and information systems which process and store information. This career area includes integration of hardware (e.g., personal computer, mainframe) and software (e.g., operating systems) components and other IT assets into an information system platform or network system. This career area also operates and manages information systems equipment and network systems, although these functions are not deemed inherently governmental.

The Computer and Information Systems Engineering Career Area contains the following job roles:

- ❖ Architecture & Standards: promotes the development, adoption, specification, certification, and application of information technology architecture and standards.
- **Data Management**: develops, organizes, and maintains a data architecture.
- ❖ Project Management: within the Computer and Information Systems Engineering area supports the acquisition of required hardware, software, support systems, and other materials while ensuring the adherence to Federal Law and DoD and DON life cycle management regulations; provides guidance for system oversight, reviews, and milestone approval for DON-managed information system programs; manages contracts and related supplier management functions; performs Contracting Officer's Representative (COR) functions.
- \* **Research & Development**: conducts basic scientific research and applies research to advanced technologies and prototypes for computer and communications systems.
- ❖ **Software Engineering**: develops, tests, operates, implements, and maintains DON software systems, as well as selects commercial off-the-shelf software; also oversees these functions.
- ❖ **System Analysis**: identifies, collects and analyzes customer/user requirements; distributes and allocates these requirements to system and subsystem levels.
- ❖ Systems Engineering: integrates information system components including hardware, software, data, policy, procedures and users to produce a working system; integrates information systems with the external environment while focusing on reusability, interoperability, standards, security, and other factors.
- ❖ Test & Evaluation: conducts all aspects of testing for a system's life cycle, including developmental, operational, and integration testing and evaluation; individuals pursuing this discipline should have working knowledge of the testing and evaluation tools and techniques used to evaluate software and information systems.
- ❖ **Systems Administration**: uses tools and methods to operate, test, maintain and manage computer systems and networks which store, transfer, and manipulate data; integrates mainframe, mid-tier, personal computers, associated networks, and systems software components to provide data processing support, products, and services to customers. This job role is not considered inherently governmental.

#### Information Assurance Career Area

<u>Definition</u>: The Information Assurance Career Area focuses on information systems security processes defined by statute and regulation to provide services for customers in support of the Warfighter. The DON uses the IA career area to focus on Critical Infrastructure Protection (CIP) and ensure adherence to applicable Federal laws and DoD and DON life cycle management regulations in the acquisition and management of required hardware, software, support services and other resources. It provides guidance for information systems security in the areas of management, reviews and milestone approval for DON managed information systems programs.

The Information Assurance Career Area includes the following job roles:

- Computer Forensics: coordinates with Federal, state, local and private sector law enforcement and other computer forensic entities to investigate and resolve issues and crimes where information may be tampered with or information security (INFOSEC) compromised; preserves evidence and restores the information infrastructure.
- ❖ Encryption: protects National assets and resources through the use of encryption tools and techniques; formulates encryption and communications security policies and recommendations; protects communications from exploitation by foreign intelligence services; ensures the security of U.S. cryptographic systems, prevents electronic emissions from various communications equipment, and physically protects communications security equipment.
- ❖ Information System/Network Security: develops and applies standards, methods, and tools to ensure application of security considerations throughout the life cycle of DoD information systems; manages incident responses, contingency planning, and reconstitution of the information infrastructure.
- ❖ Information System Security Management: manages INFOSEC, operations, technical/administrative evaluation, and oversight for the entire system/network life cycle.
- Policy: studies and interprets national level policy (promulgated by Congress, Office of Management and Budget, National Institute for Standards and Technology, General Services Administration, the Director of Central Intelligence, and DoD) and integrates it into DON policies.
- ❖ Project Management: within the Information Assurance area, supports the acquisition of required hardware, software, support systems, and other materials while ensuring the adherence to Federal Law and DoD and DON life cycle management regulations; provides guidance for system oversight, reviews, and milestone approval for DON-managed information system programs; manages contracts and related supplier management functions; performs COR functions.
- Research & Development: conducts basic scientific research and applies research to advanced technologies and prototypes for information assurance-related tools and products.
- Risk Management: evaluates information systems to identify residual risks; assesses the risk to information systems and networks from attack and/or intrusion; recommends safeguards and protections to manage and mitigate risks; documents

system security plans, policies, and procedures; performs system security accreditation and certification; often acts as Information System Security Officer (ISSO), Network Security Officer (NSO), Designated Approval Authority (DAA), or similar function.

#### **Telecommunications Career Area**

<u>Definition</u>: This career area uses standardized tools and methods to design, test, acquire, develop, operate, and manage ashore, afloat, deployed, space-based, and Joint/Allied/Coalition communication networks that provide voice, data, video, and imagery services. It includes network design, network operations, and network management, as well as switched systems engineering and transmission systems engineering. The DON uses this career area to develop and acquire new communications networks and/or modify existing networks, as well as to operate, manage, monitor, and assess communication networks and services.

The Telecommunications Career Area contains the following job roles:

- Network Communications: works with the architecture and topology of ashore and afloat, deployed and Joint/Allied/Coalition networks and telecommunications systems, including Local Area Networks (LANs), Wide Area Networks (WANs), associated components, standards, and protocols—their interoperation, control and management.
- ❖ Network Communications Engineering: engineers ashore and afloat, deployed and Joint/Allied/Coalition networks and telecommunications systems; includes knowledge of transmissions, broadcasting, switching, control and operation of terrestrial, space, radio frequency (RF) and satellite networks, and telecommunications systems.
- ❖ Network Management: designs networks and telecommunications systems and manages their operation; includes telecommunication system architectures, configuration management, and quality assurance (QA).
- ❖ Policy: develops, administers, and interprets broad communications policies and regulations that establish the DON's position on broad organizational telecommunications issues; considers the total range of existing policies (e.g., privacy and security), procedures, laws, and regulations in relation to national security and organizational program goals and objectives.
- Project Management: within the Telecommunications area, manages interrelated programs, contracts, and related supplier management functions; requires information transport and telecommunications technology life-cycle management skills.
- Research & Development: conducts basic scientific research and applies research to advanced technologies and prototypes for networks and telecommunications systems.
- ❖ Network Operations: uses standardized tools and methods to operate communication networks that provide voice, data, video and imagery services; includes network tech control, Joint/Allied/Coalition operations, and life cycle management; specialists working in this area manage and monitor communication

networks and services throughout their entire life cycle, ensure mainframe connectivity, and work with infrastructure and wiring. This job role is not considered inherently governmental.

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# **The Career Development Process**

This section provides a more detailed discussion of the career development process. It is supported by a checklist in Appendix A that can be used to track progress through this process.

#### PREPARE Phase:

#### Reviewing the Career Path Guide



In order to clearly see and meet career goals, an employee needs to be prepared. He must fully review the CPG in order to understand what it entails and what it means to his career. Just like with any significant decision (and certainly career development is important), it is critical to carefully weigh the pros and cons. It is important to review the material and anticipate what sort of information is needed to complete the relevant sections. As stated before, career planning may require some work, but it will be worth it in the long run!

#### ASSESS Phase:

#### Identifying Career Goals



A career goal is the foundation of the career development process. No other piece of information is as important as this because most of the decisions made after deciding a career goal will need to support that goal. As such, all the steps outlined in the career development process are designed to further a career goal.

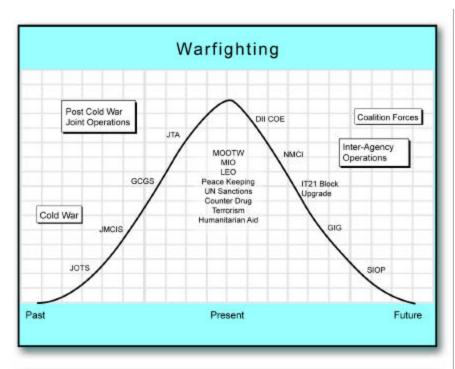
Career goals can be generic or specific. A generic career goal may be something like "I want to work with telecommunications," while a specific career goal might be "I want to be the program manager for a telecommunications procurement." As you can see, although the two goals share a similar technology, they have different levels of specificity that (may) require a totally different set of technical and professional competencies.

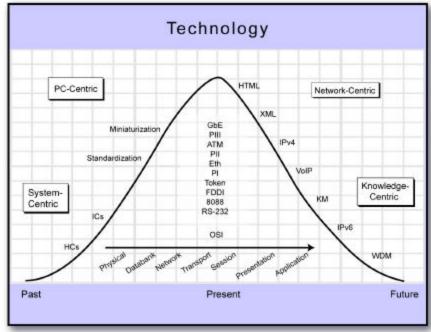
Career goals can also be short or long term. A short term goal might involve qualifying for promotion, while a long term goal might look many years into the future toward becoming a CIO. Inevitably, it is up to you to decide what combination of generic versus specific and short term versus long term goals works best. It is important to characterize the goal in these terms to structure an appropriate approach to that goal. For example, if you select a specific career goal that entails specific educational qualifications, make sure you can attain the qualifications in the time allotted.

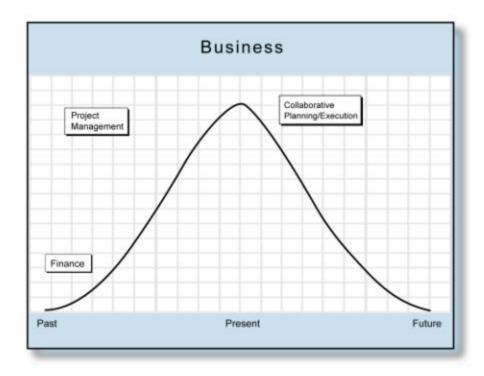
When identifying a career goal, it is important to think strategically. One way to do this is to look at career goals in terms of a "future identity curve," which is an effort to look ahead to see what types of technologies, business competencies and management skills an employee will need to be successful within an organization. It also identifies the technologies, competencies and skills that an organization emphasizes in fulfilling its mission; thus it ensures a proper "fit" between what the employee wants and what the organization needs.

A future identity curve can be displayed as a series of related charts to help employees orient personal development toward capabilities that their organization will require today and in the foreseeable future. These charts should be tailored to various broad categories of the work

performed in the organization: warfighting, technology, and business operations. The height of the bell curve in each chart represents the current intensity of the demand ("today"). The capabilities listed in the center of the curve may be thought of as today's demand. The capabilities to the left of the peak are diminishing in importance while those to the right of the curve are expected to dominate the organization's skill requirements in the future. The future skill requirements offer a strategic direction as to the opportunities in the workforce. Examples (the detail of which may be different for different organizations) are provided below:







Employees can use such a chart to strategically plan professional development with the current and future capabilities in mind. They can also use it to help identify the appropriate combination of career area and job role for the future. Hopefully, a Claimant or Activity will provide examples that show where the organization is headed and which specific technologies will be emphasized.

During the process of identifying a strategic career goal, employees should consider the following questions, focusing on general answers:

- 1. What are you very good at and enjoy doing?
- 2. In your current position, which types of assignments do you most enjoy?
- 3. What do you envision as your career path? What is your ultimate goal? What milestones do you see along the way?
- 4. What education, courses, and/or training will help move you toward your vision and goals? In which of these are you willing to invest your own resources?
- 5. How will your development benefit the Command, taxpayer and the warfighter?

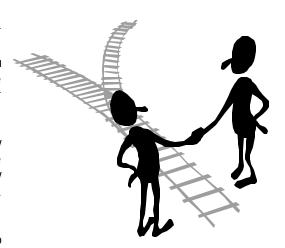


Determining how to accomplish the goal is the next step in the process. For example, you may only need to continue current work assignments while seeking out greater responsibility and honing technical competencies. Alternately, a goal may require a change in position or department, taking on different responsibilities, or even leaving the DON completely (see the discussion on career paths in the next section). Most importantly, the time frame in which the goal is accomplished must be carefully considered. Again, keep in mind the time needed to meet potential training, education, or job requirements a particular career may prescribe. Also, the skills needed to perform well in a particular career will likely change over time (especially true with information technology). All of these items must be thoroughly considered before drafting a CPP.

#### **Identifying Career Paths**

Before preparing a CPP, it is helpful to think long term. Where do you want to be in five years, ten years, or even fifteen years? Do you or your organization have an identified career path now? Is it going to take you where you want to go? If not, what career paths are available to achieve long term goals? These and other important questions are discussed below.

In general, a career path describes the "frequently traveled routes" from where a person is today to where she wants to be (career goal). Career paths generally specify a combination of education and/or work experience toward positions with greater responsibilities. There are several career path options available in any career development system; these are also available to the DON IM/IT workforce:



- Career Ladder
- Career Bridge
- Dual Track
- Career Transition

In some cases, DON major claimants will have specified career paths for certain job functions that reflect these options. These career paths will indicate the general mix of job assignments, training, experience and education at different levels (i.e., GS 5 through 15). Such career paths should be used wherever possible. However, when specific career paths are not available, employees will work with their managers and mentors to devise them. This approach does have one distinct advantage: they will be tailored to the individual.

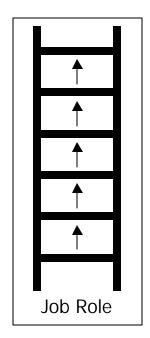


The CPP is the tool for documenting the most efficient path to reach a career goal. Like a pilot submits a flight plan documenting the different checkpoints a flight is intended to take, an employee submits a plan that provides similar information pertaining to his career goal. This will allow him not only to track his progress once started, but to evaluate if it makes sense, by sharing the CPP with his manager and/or mentor.

#### Career Ladder

A career ladder is a progression of positions in an occupational series or job role. The employee typically advances from entry to intermediate to journeyman to senior specialist/manager levels. She becomes qualified for higher level positions through a combination of resident training, independent study, increasing responsibility, experience and on-the-job training. A career ladder is most appropriate for those employees who are generally satisfied with the work they are doing now and want to acquire greater responsibility in the same job specialty.

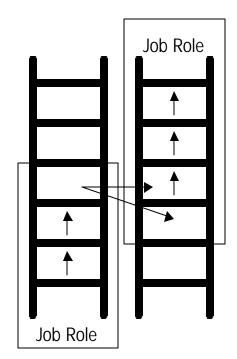
A good example of a career ladder is the entry level employee who enters the workforce and "moves up the ranks." She may start out as a GS-5 Computer Specialist and, over time, becomes a GS-13 in the same field. Obviously, she would accumulate significant technical, administrative, and professional experience during this time period (which may last her entire career).



# Career Bridge

A career bridge is similar to a career ladder except that more than one occupational series or job role is involved. An employee may be in one job role and take a "bridge" position that allows him to move into a different job role. Experience required for qualification in the bridge assignment may be attained by periodic details, cross training, or developmental assignments. This type of career path is suitable for those employees who are interested in doing work that is different from their current assignment. The bridge could be between different job roles or even between different career areas.

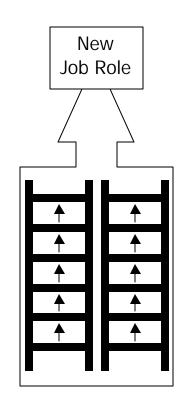
An example of a career bridge shares a similar beginning with the career ladder example above, but the outcome is different. In this case, the employee who might be a Computer Clerk or Assistant could aspire to have a career in a Computer Specialist field. To fulfill this goal, he transitions (at an appropriate time) to an appropriate job role within that career field. Obviously, he would need to meet the specific professional and technical competencies of the target job role. In some cases, he may need to decide that a temporary step backward (i.e., voluntary change to a lower grade) is necessary to gain the competencies necessary for the desired job role.



#### **Dual Track**

With a dual track, an employee receives training or gains experience for the current assignment as well as for a related but different job role with its own training and experience requirements. Like a career bridge, the experience required for qualification in the secondary assignment may be attained by periodic details, cross training, or developmental assignments. However, this is in addition to the development requirements for the current assignment. A dual track may be appropriate for an employee who wants to gain exposure to a specific job role before "bridging" over to it. Or it might be appropriate for an employee whose experience gained in the secondary assignment can be applied as an added benefit to the current assignment. High performance matrix-management organizations often challenge their employees to consider dual track or even multiple track assignments. This is because such assignments offer the "broadening" required of the KM/IM/IT workforce now and in the future. Again, like a career bridge, a dual track may involve job roles in different career areas.

For example, an employee may be considered a candidate for a management position that requires a specific set of competencies that cannot be gathered in her current position. To acquire the needed competencies, she takes a "detail" position (e.g., in contracts) to understand a specific aspect of

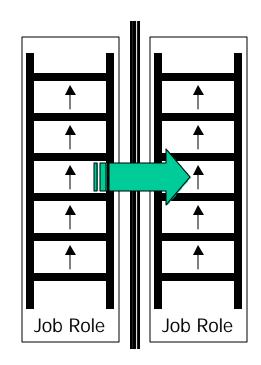


the DON's business. Upon completion of this temporary assignment, she may even need further exposure to other positions to mold her into a "complete" manager. By taking assignments in multiple job roles, she is effectively taking a dual track to gain the competencies required of a manager.

#### Career Transition

A career transition may be best defined as a significant career change from the current assignment. The change may be to a career that is unrelated to the current work, or to an assignment that is outside the employee's organization. While the first three career path options involve relatively straightforward decisions about existing job roles or occupational series, a career transition involves a much more indistinct outcome. By its very nature, a career transition offers both risks and rewards.

An example of a career transition would be a situation where a clerical worker wants to move into KM/IM/IT work, or an employee with a goal of working for the private sector takes a job with industry or academia to fulfill that goal.



Manager

Senior Specialist

lourney

ntermediate

#### Career Levels

Along with the career path that leads to career goals, career levels are also important factors. This is because varying degrees of competencies, both professional and technical, are required at specific grade levels. In fact, the CPG identifies the proficiency (grade) level associated with each professional and technical competency. It is the employee's responsibility to fulfill these requirements in order to progress along his chosen career path.

Five career levels have been identified for most of the DON KM/IM/IT job roles<sup>4</sup>:

Entry: GS-5 and GS-7

❖ Intermediate: GS-9

❖ Journey: GS-11 and GS-12

❖ Senior Specialist/Manager: GS-13 through GS-15

Executive: Senior Executive Service (SES)

Remember that the career levels listed above may be different for different locations around the country. For example, a "journey" position in the field may be filled by an employee with a lower GS level than a journey position at a Headquarters location, where both are in the same job role, but with a different scope (organization-wide versus the Activity-level). The career levels listed here are meant to provide a framework that can be modified as appropriate.

In addition, the levels are meant to capture the professional nature of the types of work performed by the KM/IM/IT workforce. Those individuals in administrative job roles should view these levels as targets.

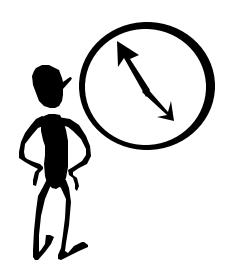
Some positions may be designated as key positions. These are managerial or executive positions at the GS-13 level or above that are responsible for the management and administration of highly visible or sensitive programs, and whose incumbents are expected to possess a breadth of knowledge related to the position. These positions are found throughout the DON.

<sup>4</sup> Note that these may differ slightly from other representations of career levels (such as for DAWIA).

#### Time Frame

Regardless of the path needed to reach a career goal, the time frame is important because of the time involved in meeting the training, education, or job experience requirements for a particular career. Some education programs, such as college degrees, take two to four years or more to complete. Although they may not take as long, certification programs often involve a significant time investment. Also consider the amount of time it takes to accumulate the experience needed for the desired job roles or grade levels in your career path. Some may take many years of government service to attain, while others may not take as long.

Time frame is also important for another crucial reason: the skills needed to perform well in a particular career will likely change over time. This is especially true with information technology. Skills that are considered "cutting edge" today may (or may not) be commonplace in a few years. Other skills may not even be needed in the future. It is difficult for anyone to predict the longevity of a skill; however, it is important to look at the time frame to determine if the skills you have now will be useful in the future, or if you have time to acquire the skills needed.



#### Self Assessment / Inventory



Once you have considered the career goal, path, level, and time frame, the next step is to perform a self assessment of competencies based on a current career area and job role. This provides a set of data that can be compared with the competencies needed for a job role in a desired career area ("target competencies").

To perform the self assessment, first determine the appropriate career area and job role that corresponds to your current situation. (Refer to the previous sections for a discussion and listing of this information.) Next, fill out assessment worksheets that correspond to the KM/IM/IT competencies required in your current career area and job role. The worksheet is a matrix that includes, among other things, information about the competencies that are required for your current job, the learning objectives of those competencies, and your current and required level of proficiency in each competency. The matrices, found in *Volume II*, include instructions on how to fill them out.

In addition to KM/IM/IT competencies, also complete the matrix on professional skills, referred to in this CPG as "Career Foundational" competencies. These include skills in such areas as leadership, teamwork, etc. Since these competencies apply to everyone, they are found in the **Career Foundational Competencies** section of this volume.



Supervisors, mentors, and any other individuals who can provide accurate data about an employee's competencies should be consulted. Because individuals have a tendency to either overestimate or underestimate their capabilities, having another person who knows them provide

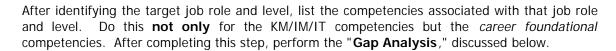
data gives more reliable information. With accurate information, an employee can more easily determine which competencies need improvement.

With a completed self assessment, take the information collected during this phase and compare it with the competencies needed in your target job role. Then formulate a plan to attain those competencies. This is accomplished in the **VALIDATE** phase, discussed below.

#### VALIDATE Phase:

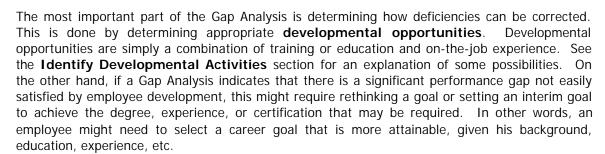
## **Target Competencies**

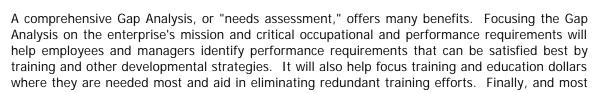
Once an employee has identified the competencies in her current job role, she identifies the competencies and associated performance levels expected in a "target" job role. This is done to identify competency needs. Work with a manager and/or mentor to determine the job role, level, and associated competencies that are most appropriate for you. Note that the target set of job role, competencies, and performance level should be aligned with the overall objective of your organization. In other words, your selection should relate to realistic jobs, as most organizations will not support employee development for a set of skills that are not useful to the DON or to KM/IM/IT.



## Gap Analysis

A Gap Analysis is a comparison of current competencies (based on current and past job assignments) with competencies needed (based on a career goal). A deficient competency might be one in which there is some educational background but no practice on a daily basis. It also might be a skill that the employee does not have or a skill that requires a little update. The results of this analysis help to accurately and completely define performance gaps; therefore, it is important that this step be conducted with a manager/mentor. The assessment worksheets In *Volume II* provide instructions for performing the Gap Analysis.













importantly, it will help **achieve the career goal** by providing the most effective developmental activities to satisfy the identified gaps.

## Identify Developmental Activities



After determining the competencies needing development, select appropriate developmental activities. These activities are organized into the broad categories: **Learning** and **Work-Based/Experience**. Managers and employees will need to apply flexible solutions to identify these activities based on available developmental options. Definitions and examples of the various developmental activities are provided below. And while specific examples are shown in the assessment matrices in *Volume II*, employees are encouraged to discuss other activities with their management.

## Learning:

- Formal Classroom
- Self-Study
- ❖ Distributed Learning/Computer Based Training (CBT)/Web Based Training (WBT)
- Competitive Programs

## Work-Based/Experience:

- Developmental Assignments
- On-the-Job Training (OJT)
- Job Aids
- Coaching/Mentoring
- Shadowing
- Work Teams
- ❖ "Sink or Swim"

#### Learning:

<u>Formal Classroom</u> is often the first type of learning that comes to mind. However, this is certainly not the only source of employee development. This type of learning includes courses, certification programs, workshops, seminars, and professional conferences. It can involve courses or other educational events that are presented in an academic setting. Formal classroom training and education can be offered by the DON, colleges and universities, commercial training vendors, and professional organizations.

#### Examples:

- A four-year college degree program in Management Information Systems
- A seminar on Ethics
- A week-long course on Electronic Commerce

<u>Self-Study</u> (sometimes called independent study) is typically individually-paced onsite or correspondence programs offered by commercial, academic, or government sources, either traditional or computer-based. It can also include trade journals, books, and other professional development materials.

<u>Distributed Learning/Computer Based Training/Web Based Training</u> takes place when the instructor and trainee are separated by space and/or time and includes educational instruction that is delivered via the Internet, computer-based (e.g., via a CD-ROM or network connection), videotape and/or audio tape.

## Examples:

- A satellite training program on Information Systems Engineering
- A video-teleconference seminar on Software Engineering standards
- DON-sponsored CBT offered by Net-G
- WBT on the Navy Learning Network (NLN) portal

<u>Competitive Programs</u> are typically academic, private sector and government/DoD education and development programs with limited DON allocations. Participants are selected through a competitive process.

## Examples:

- Information Resources Management College (IRMC) Advanced Management Program
- Defense Leadership and Management Program (DLAMP)
- Naval Postgraduate School (NPS)
- Naval War College (NWC)

## Work-Based/Experience:

<u>Developmental assignments</u> include assignments to new positions that provide ways for an employee to gather new skills, learn new techniques or perform different types of work. They provide management with the opportunity to cross-train employees in more than one competency, providing staffing flexibility. They also enhance employees' understanding of the various enterprise functions, systems, operations and interrelationships. Developmental assignments vary widely in length and organizational or geographic location.

## Example:

• A six month assignment in Contracts, Program Management, etc.

On-the-Job Training, by and large, is the primary type of training and development an employee receives, but is the least recognized. OJT is typically presented one-on-one at the work site. To

be effective, OJT must include well-planned sessions between the employee and a designated "trainer," and be led by a "trainer" who knows the job, has the desire and ability to train and provide feedback, and is willing to set aside sufficient time to accomplish the training without interruption.

Job Aids are tools to guide tasks specific to a job. Job aids typically are intended to be used in situations where the tasks are complex or not performed frequently. An employee may be instructed to use a job aid as part of a developmental strategy.

Examples: Checklists, decision aids, procedures manuals, flowcharts

## Informal learning yields results...

Researchers discovered that up to 70 percent of learning actually takes place informally. Informal learning is defined as "any learning that occurs in which the learning process isn't determined or designed by the organization." Formal training includes both an expressed organization goal and a defined process. Informal learning can occur whether or not there's an expressed goal, and, when it works best, serves individual as well as organization objectives. For example, informal learning might best occur when a mentor shows a new employee how to use a new software package through a demonstration, rather than through a classroom presentation.

Source: Nancy Day, <u>Workforce</u>, June 1998, Vol. 77, No. 6, pp. 30-34.

<u>Coaching/Mentoring</u> involves developing an employee's capabilities and experience through planned tasks and continuous feedback and advising. Mentoring involves providing an organizational role model to guide an employee's career in the organization.

<u>Shadowing</u> assignments are ones in which an employee "shadows" or accompanies another employee, often of a higher grade level, rank, or with greater experience, usually for a short period of time (up to a week or two) with subsequent discussion and assessment of events.

<u>Work Teams/Projects</u> are temporary or permanent work groups, Integrated Product Teams, or projects formed to resolve specific problems, improve processes, and communicate outcomes to the organization. An employee may be guided to become involved in a work team to provide specific expertise, broaden his communication skills, organizational awareness, etc.

## Examples:

- Involvement with a KM/IM/IT community of practice
- Member of a task force investigating a specific KM/IM/IT issue

<u>Sink or Swim</u> may be opportunities which arise out of chaos in an organization (i.e., sudden illness or transfer of a co-worker or supervisor) that allow an employee to rise to the occasion and take charge of an assignment, even for short periods, so that the mission of the organization continues. These situations, while not uncommon, present a challenge and great learning experience for the employee who volunteers to manage the unexpected tasking. Higher level management may need to guide the employee to success in the assignment.

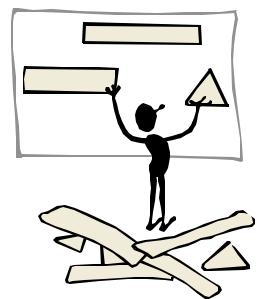
If a determination is made that any of these strategies should be part of the solution to an employee's performance gap, the next step is to formally plan for the developmental investment. This is done on the CPP form. Again, keep in mind that the assessment matrices in *Volume II* indicate only a portion of the potential developmental activities available for a particular competency. Employees are encouraged to look beyond what is listed (for example, specific commercial courses) to arrive at the most appropriate course of developmental action.

## **Develop Career Progression Plan**



Once developmental activities needed to fill the "gaps" to reach the targeted performance level are identified, assimilate the information into a draft CPP. Fortunately, a majority of the difficult work in this process is complete just by identifying current competencies, target competencies, and developmental activities!

See the "Career Progression Plan" section below for the CPP form. While it is designed to be straightforward, directions are provided with the form. Try to be as complete as possible, but keep in mind that the resulting CPP is only a **draft** at this point. There will be an opportunity to make changes later on. Depending on the policies in your organization, the CPP may be used by itself, or as a tool for developing an IDP. Indeed, an IDP can be used *instead* of the CPP.



Once the CPP is drafted, have it reviewed by your manager and/or mentor prior to finalizing and executing the plan.

## Review Career Progression Plan



With a draft CPP in hand, the employee discusses this plan with her manager (and a mentor if available). This meeting is necessary to ensure that the time investment expended in developing this plan produces the desired results.

In order for the discussion to be as fruitful as possible, consider the following recommendations:

- ❖ Ensure that the draft CPP is as complete as possible
- Understand the justification for the developmental activities and time frames that are selected
- ❖ Be certain that the "path" identified is the most effective means of reaching career goals
- ❖ Estimate the costs of training, in terms of time and funding required, for training and education opportunities in the CPP
- ❖ Be open to suggestions from the manager/mentor

Once the review is complete, finalize the CPP based on input from the manager/mentor during the discussion. Upon completion of the final CPP, execute the plan.

## Finalize Career Progression Plan





With input in hand, "formalize" the CPP by making the necessary adjustments to the plan. Once the adjustments have been made, have your manager sign it. Congratulations! The plan is ready and you can start developing competencies to attain your desired career goal!

### **EXECUTE Phase:**

## Pursue Developmental Activities



At this point, the CPP should have outlined the developmental activities required to meet your career goals. During the Execute phase, take training courses, pursue work-based experience (i.e., job assignments) and the other activities required. Because of its importance, be sure to regularly update your CPP as you complete training, education and job-related assignments. In fact, this may result in an added side benefit: having a list of training/development activities you pursued, skills and competencies gained, that can be used for annual assessments!

## **Career Mobility**

Career mobility potentially requires more drastic action than simply pursuing developmental activities. This usually involves making a career, assignment, job role, or geographic location change that supports the career goal outlined in the CPP. It also involves being available for assignments that require travel, overtime, or personal time. You are encouraged to weigh career mobility against your personal lifestyle in setting a career goal.





If career mobility or progression takes an individual to a new location or position, he should plan to reevaluate his career goal from the perspective of his new position. However significant the steps taken might be, management should assist in the transition process.

## Mid-Stream Evaluation



This activity is conducted primarily by a manager and may be part of a programmed, periodic (i.e., yearly) assessment of employee performance. While discussing an employee's performance, we recommend reviewing the most recent CPP to support the performance review. With the CPP, you can easily illustrate the pursuit of training and education opportunities, workbased experience, and new competencies.

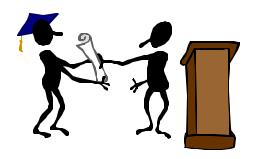
Although individual relationships will dictate the frequency of evaluations, it is recommended that they take place every six to twelve months. At a minimum, they should occur in concert with the yearly performance review. A Mid-Stream Evaluation is extremely useful because it helps an employee assess the skills they are acquiring or improving, which, in turn, lessens the gap between what is possessed and what is needed.



A mid-stream evaluation, however, may be conducted outside the annual review, at any time, as often as needed, and may even be requested by **you**. Essentially, this is analogous to adjusting the course of a ship to help it reach its destination quicker, safer and more effectively. Therefore, this is useful if you have questions about the path you are taking, wish to become involved in a different project at work to enhance personal experience, or if you have identified a specific course that is available. Of course, if you determine that changes to the CPP are needed, revise it in coordination with your manager.

# **Certification Programs**

The DON recognizes that there are a number of certification programs critical to the success of the IM/IT workforce. Two of these programs include the Defense Acquisition Workforce Improvement Act (DAWIA) Certification program and the CIO Certificate program. We recommend that you keep these programs in mind when assessing your target competencies and development opportunities. Overviews of both programs are provided below, with more detailed information found in Appendix C.



#### **DAWIA Certification**

The Undersecretary of Defense for Acquisition has established education, training, and experience standards for each acquisition position, based on the level of complexity of duties carried out in that position. Those standards are designated as either "mandatory" or "desired" and aim to provide a DoD-wide, common foundation of knowledge necessary to ensure that the acquisition workforce is fully proficient in the acquisition process.

The acquisition positions most relevant to this CPG are the ones designated within the "Communications-Computer System" career field. This field is generally responsible for "directly supporting the acquisition of automated information systems and interconnecting components (to include hardware, software, firmware products, or other items) used to create, record, produce, store, retrieve, process, transmit, disseminate, present, or display data or information." Typical duties of this field include identifying requirements, writing and/or reviewing specifications, identifying costs, obtaining resources, testing, evaluating, and managing life cycle support. To be considered an acquisition position, duties must be accomplished under the authority of DoD 7920.2-M (reference (v)).

See Appendix C for more information.

# CIO Certificate Program

The CIO Certificate Program, sponsored by the DoD CIO, provides a source of graduate education for all Federal CIOs to use in developing agency personnel. It is responsive to the requirements set forth in the Clinger-Cohen Act of 1996 and establishes an official certificate to serve as recognition that an individual has received education in the Federal CIO competencies. The certificate is signed by the DoD CIO and the Dean of the IRMC. Additionally, students completing the program earn 15 graduate level credit hours that can be applied toward a Masters' degree from Syracuse University or the University of Maryland University College.

The program focuses on twelve subject areas directly related to CIO competencies identified by the Federal CIO Council<sup>5</sup>:

<sup>&</sup>lt;sup>5</sup> Federal CIO Council, Clinger-Cohen Core Competencies, revised September 2000.

- Policy and Organizational
- Leadership and Managerial
- Process/Change Management
- Information Resources Strategy and Planning
- **❖** IT Performance Assessment: Models and Methods
- Project/Program Management
- Capital Planning and Investment Assessment
- ❖ Acquisition
- ❖ E-Government/Electronic Business/Electronic Commerce
- ❖ IT Security/Information Assurance
- Technical
- Desktop Technology Tools

Each subject is tracked to one or more courses that educate the student in a particular subject area. For example, the subject area of Process/Change Management is taught in the following courses:

- Reengineering Organizational Processes
- Evaluating Strategic Alternatives with Modeling and Simulation
- Electronic Commerce: Doing Business on the Information Highway

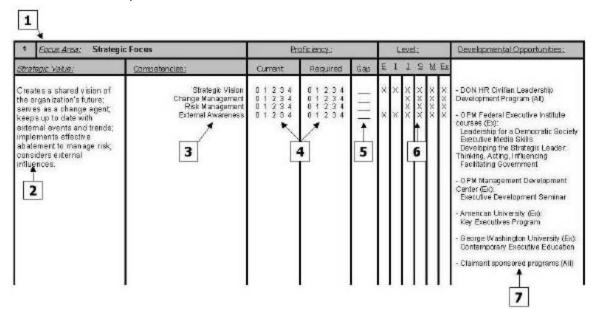
Some courses are primary offerings, while others are enrichment. See Appendix C for more information.

# **Career Foundational Competencies**

Use the assessment matrix provided below to perform an assessment of career foundational competencies (see *Volume II: Career Areas* for assessment matrices geared toward KM/IM/IT competencies). The matrix is organized by focus area (Strategic, Outcome Oriented, Supervisory and Team, Interpersonal, Mission, Personal Mastery, and Knowledge). Definitions for the career foundational competencies are also provided below.



Some of the sections on the matrices are for information only. Other sections require collaboration between the employee and manager. Instructions for each matrix section are provided below, based on the numbered figure below (using the Strategic focus area as an example). Keep in mind that these matrices are slightly different from the ones found in Volume II for KM/IM/IT competencies.



- 1. **Focus Area** contains the name and number of the focus area.
- 2. **Strategic Value** contains a description of why the focus area is important.
- 3. **Competencies** lists the various competencies (knowledge, skills, abilities, and behaviors) associated with the focus area.
- 4. **Current Proficiency & Required Proficiency -** circle the number corresponding to the current and required proficiency (or performance level) for each of the listed competencies. In some cases, not all competencies will apply; if you do not require proficiency in a given characteristic, circle a zero (0) in the Required Proficiency column. This section may require the employee and manager to work together to determine these values.

The assessment scale corresponding to the numerical proficiency values is as follows:

- 0 Does not display, demonstrate knowledge of or skill in the competency
- 1 Rarely displays, demonstrates knowledge of or skill in the competency
- 2 Infrequently displays, demonstrates knowledge of or skill in the competency
- 3 Frequently displays, demonstrates knowledge of or skill in the competency
- 4 Epitomizes the display, knowledge of or skill in the competency
- 5. **Gap** subtract the current proficiency from the required proficiency for each listed competency and place the resulting number on the line provided in this section. This is the first step in the "gap analysis." If the number is zero (or less than zero), then proficiency in the competency is met and further development may not be required. If the number is positive, there is a deficiency in the competency and a developmental strategy is required; the larger the number, the greater the deficiency. Next, devise a strategy for closing any gap by using a combination of work-based and learning developmental activities.

It is important to weigh these competencies accurately; therefore, work closely with your manager to fill out this section.

- 6. **Level** suggests the appropriate level where the competency is found. As stated earlier, this may be different based on individual situations or in different geographic areas. It is used for information only. Levels include:
  - E Entry Level
  - I Intermediate Level
  - J Journey Level
  - S Senior Specialist
  - M Manager/Supervisor Level
  - Ex Executive/SES Level
- 7. **Developmental Opportunities** This is a list of suggested developmental opportunities that may be useful in gaining proficiency in some of the competencies. These activities are used when writing the CPP or IDP. Note that these are suggestions in addition to any general programs or work-based experience that *directly* correspond to the competencies (i.e., Ethics Training) which may be sponsored by your organization, and are used for information only.

1 Focus Area: Strateg	gic Focus	<u>Pro</u>	oficiency:			<u>Lev</u>	<u>el:</u>			<u>Developmental Opportunities:</u>
Strategic Value:	Competencies:	Current	Required	Gap	<u>E</u>	Ι <u></u>	<u>S</u>	<u>M</u>	<u>Ex</u>	
Creates a shared vision of the organization's future; serves as a change agent; keeps up to date with external events and trends; implements effective abatement to manage risk; considers external influences.	Strategic Vision Change Management Risk Management External Awareness Legal, Government and Jurisprudence	0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4	0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4		X	X X X X X X X X X X X X X X X X X X X		X X X X X	X X X	- DON HR Civilian Leadership Development Program (All)  - OPM Federal Executive Institute courses (Ex): Leadership for a Democratic SocietyExecutive Media SkillsDeveloping the Strategic Leader: Thinking, Acting, InfluencingFacilitating Government  - OPM Management Development Center (Ex): Executive Development Seminar  - American University (Ex): Key Executives Program  - George Washington University (Ex): Contemporary Executive Education  - Claimant sponsored programs (All)

2 Focus Area: Outcom	ne Oriented Focus	<u>Pro</u>	oficiency:			Leve	<u>:</u>			<u>Developmental Opportunities:</u>
Strategic Value:	Competencies:	Current	Required	Gap	<u>E</u> <u>I</u>	<u>J</u>	<u>S</u>	<u>M</u> .	<u>Ex</u>	
Continuously seeks to improve quality of services, products and processes; takes action and risks when needed; recognizes and defines problems; applies quality principles; judiciously manages resources; stays informed about and applies new technologies; is adept at managing information; develops insights and solutions; achieves goals and overcomes obstacles; facilitates process improvement.	Customer Orientation Decisiveness Problem Solving Quality Principles Resource Mgmt & Stewardship Technology Management Information Resource Mgmt Creativity & Innovation Results Orientation Process Oversight Management Program Development, Planning & Evaluation	0 1 2 3 4 0 1 2 3 4	0 1 2 3 4 0 1 2 3 4		× × × × × × × × × × × × × × × × × × ×	X X X X X X X X X X X X X X X X X X X	××××××××	X X X X X X X	X X X	- DON HR Civilian Leadership Development Program (All)  - Defense Leadership and Management Program (Ex, M)  - OPM Management Development Center (M, S):Government Performance and Results/Reinventing the Organization  - Congressional Quarterly (M, S): Reinventing Government: Managing for Results  - USDA Graduate School (M):Current Issues in Financial Management for Managers and Supervisors  - Claimant sponsored programs (All)

3 <u>Focus Area:</u> Superv	visory and Team Focus	<u>Pro</u>	oficiency:			<u>Le</u>	vel:			<u>Developmental Opportunities:</u>
Strategic Value:	Competencies:	Current	Required	Gap	<u>E</u>	<u>l</u> .	<u>J</u>	<u>S</u> <u>M</u>	<u>Ex</u>	
Assists others to learn and continually improve their performance; fosters cooperation, communication and consensus among groups; anticipates and seeks to resolve conflicts; promotes employee well-being; respects and values diversity; demonstrates and encourages high standards of behavior.	Coaching/Counseling/Mentoring Team Building Conflict Management Human Resources Managemen Diversity Awareness Situational Leadership	0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4	0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4		x	X 2	X X X	X X X X X X X X X X X X X X X X X X X	X X X	- DON HR Civilian Leadership Development Program (All)  - OPM Management Development Center:Leadership Assessment Program (M, S)Managing Employees with Disabilities (M)Management Skills for Team Leaders (M, S, J)  - OPM Federal Executive Institute:Work Team Development Program (M, S)Facilitating Government (Ex, M, S)  - USDA Graduate School (M):Managing Diversity: Values and Foundation  - Center for Creative Leadership: Working with Others (M, S) Foundations of Leadership (M, S, J)  - Defense Leadership and Management Program (Ex, M)  - Claimant sponsored programs (All)

4 Focus Area: Interpe	ersonal Focus	<u>Pro</u>	oficiency:			<u>Leve</u>	<u>l:</u>		<u>Developmental Opportunities:</u>
Strategic Value:	Competencies:	Current	Required	Gap	<u>E</u> <u>I</u>	Ī	<u>S</u> !	<u>M Ex</u>	
Considers and responds appropriately to the needs of others; communicates well both orally and in writing; appropriately uses influence and negotiation skills; develops networks and builds alliances; identifies internal and external politics; clearly articulates, presents and promotes ideas.	Interpersonal Skills Oral/Written Communication Influencing/Negotiating Partnering/Teaming Political Savvy Presentation/Marketing Skills Org. Representation & Liaisor	0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4	0 1 2 3 4 0 1 2 3 4		X X X X	X	X X X	X	- DON HR Civilian Leadership Development Program (All)  - OPM Management Development Center:Executive Communications Workshop (Ex)Management Skills for Team Leaders (M, S, J)  - Congressional Quarterly: Coalition Building (Ex, M)  - Defense Leadership and Management Program (Ex, M)  - Claimant sponsored programs (All)

5 <u>Focus Area:</u> Mission	n Focus	<u>Pro</u>	oficiency:			<u>Le</u>	<u>/el:</u>			<u>Developmental Opportunities:</u>
Strategic Value:	Competencies:	Current	Required	Gap	<u>E</u>	<u>l</u> .	<u> </u>	<u>S</u> <u>M</u>	<u>Ex</u>	
Possesses knowledge of the mission and organization of the DON; exhibits the DON's core values; understands and appreciates the nature of military strategy and policy, national security and decision making, and Joint Operational Planning; understands the role of the DON within the DoD as well as the missions of the other Defense Agencies and Military Departments; serves as organizational spokesperson.	DON Mission/Org. Awareness Military Strategy & Policy National Security Strategy Joint Military Operational Planning Joint Service Perspective Public Safety and Security	0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4	0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4 0 1 2 3 4		X		× 3	X X X X X X X X X X X X X X X X X X X	X X	- Naval War College (M, Ex)  - Naval Postgraduate School (M, Ex)  - National Defense University (M, Ex)  - OPM Management Development Center (M, Ex):National Security Policy  - Claimant sponsored programs (All)

6 Focus Area: Person	nal Mastery Focus	<u>Pro</u>	oficiency:		<u>Lev</u>	<u>/el:</u>		<u>Developmental Opportunities:</u>
Strategic Value:	Competencies:	Current	Required	Gap	<u>E</u> <u>I</u> .	<u> 2 L</u>	<u>M Ex</u>	
Demonstrates a core set of professional competencies deemed required by all individuals in the DON IM/IT workforce.	Self-direction Reasoning Resilience Flexibility Ethics/Professionalism Honesty/Loyalty Continual Learning Attention to Detail Technical Competence DON Core Values Memory Mental Visualization Reading Self-esteem	0 1 2 3 4 0 1 2 3 4	0 1 2 3 4 0 1 2 3 4		X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X	- DON HR Civilian Leadership Development Program (All)  - OPM Federal Executive Institute (Ex):Executive Career Management Program  - Claimant sponsored programs (All)

7 <u>Focus Area:</u> Knowle	edge Focus	Proficiency:		<u>Lev</u>	<u>′el:</u>	<u>Developmental Opportunities:</u>	
Strategic Value:	Competencies:	Current	Required	Gap	<u>E</u> <u>I</u> <u>.</u>	<u>S M</u> <u>E</u>	X
Provides the right information to the right decision-maker at the right time, thus creating the right conditions for new knowledge to be created; possesses the commitment to put information to work for the DON enterprise; understands the organization as a network of interrelated functions; effectively stores, mines, processes and protects information.	Data & Information Management Systems Thinking Integration Trust Collaboration Information Sharing Information Patterning Information Protection Scanning Intuition	0 1 2 3 4 0 1 2 3 4	0 1 2 3 4 0 1 2 3 4		X	X X X X X X X X X X X X X X X X X X X	<ul> <li>Systems Thinking</li> <li>- DON HR Civilian Leadership</li> <li>Development Program (All)</li> <li>- Claimant sponsored programs (All)</li> </ul>

# **Definitions**

Focus Area / Competency	Definition
Strategic Focus	
Strategic Vision	Creates a shared vision of the organization; promotes wide ownership; champions organizational change.
Change Management	Serves as a positive agent for changes in the organization's structural alignment, climate, or operational processes. Learns about and proactively advocates and influences the adoption of promising new ideas, methods, services, and products from knowledge of best practices in government and industry.
Risk Management	Identifies potential risks to product/program/processes early and implements effective abatement or control measures; defines evaluation criteria early and continuously collects, assesses, shares, and responds to data appropriately.
External Awareness	Stays informed on laws, policies, politics, Administration priorities, trends, special interests, and other issues; considers external impact of statements of actions; uses information in decision making.
Legal, Government and Jurisprudence	Knowledge of laws, legal codes, court proceedings, precedents, legal practices and documents, government regulations, executive orders, agency rules, government organization and functions, and the democratic political process.
Outcome Oriented Focus	
Customer Orientation	Actively seeks customer input; ensures customer needs are met; continuously seeks to improve the quality of services, products, and processes. Balances customer desires with task requirements to produce a quality product or process.
Decisiveness	Takes action and risks when needed; makes difficult decisions when necessary.
Problem Solving	Recognizes and defines problems; analyzes relevant information; encourages alternative solutions and plans to solve problems.
Quality Principles	Understands and applies quality principles such as teamwork, quantitative decision-making, and continuous process improvement to meet or exceed customer expectations.
Resource Management and Stewardship	Prepares and justifies budget; monitors expenses; manages procurement and contracting.
Technology Management	Encourages staff to stay informed about new technology; applies new technologies to organizational needs; ensures staff are trained and capable.
Information Resource Management	Identifies a need for and knows where or how to gather information; organizes and maintains information or information management systems
Creativity and Innovation	Develops insights and solutions; fosters innovation among others.
Results Orientation	Works persistently to achieve goals and overcome obstacles; takes advantage of opportunities to further goals without creating opposition; displays accountability for results.
Process Oversight Management	Develops/demonstrates the ability to examine systems and work flows within the organization to facilitate process assessment and improvement.
Program Development, Planning & Evaluation	Establishes policies, guidelines, plans, and priorities; identifies required resources; plans and coordinates with others; monitors progress and evaluates outcomes; improves organizational efficiency and effectiveness.
Toam Focus	
Team Focus Coaching/Counseling/Mentoring	Develops skills in observation, listening, and one-on-one teaching; applies them to assist others to learn and continually improve their performance; and provides effective feedback; develops the ability to counsel others to help them to achieve personal and professional growth.
Team Building	Considers and responds appropriately to the needs, feelings, capabilities, and interests of others; provides feedback; treats others equitably; fosters cooperation, communication, and consensus among groups.
Conflict Management	Anticipates and seeks to resolve confrontations, disagreements, and complaints in a constructive manner.
Human Resources Management	Ensures effective recruitment, selection, training, performance appraisal,

	recognition, and corrective / disciplinary action; promotes affirmative employment, good labor relations, and employee well-being.
Diversity Awareness	Respects and values the differences and perceptions of different groups/individuals; recognizes the value of cultural, ethnic, gender, and other individual differences; provides employment and development opportunities for a diverse workforce.
Situational Leadership	Demonstrates and encourages high standards of behavior; adapts leadership style to situations and people; empowers, motivates, and guides others.
Interpersonal Focus	
Interpersonal Skills	Considers and responds appropriately to the needs, feelings, capabilities and interests of others; maintains self-control in difficult situations; provides feedback in a constructive manner.
Oral/Written Communication	Listens to others; makes clear and effective oral presentations to individuals and groups. (NOTE: use of a sign language interpreter may be appropriate for persons who are deaf or hard-of-hearing.); communicates effectively in writing; reviews and critiques others' writing.
Influencing/Negotiating	Networks with and provides information to key groups and individuals; appropriately uses negotiation, persuasion, and authority in dealing with others to achieve goals.
Partnering/Teaming	Develops networks and builds alliances; engages in cross functional activities, collaborates across boundaries and finds common ground with a widening range of stakeholders; utilizes contacts to build and strengthen internal support bases.
Political Savvy	Identifies the internal and external politics that impact the work of the organization; approaches each problem situation with a clear perception of organizational and political reality; recognizes the impact of alternative courses of action.
Presentation/Marketing Skills	Demonstrates the ability to clearly articulate, present, and promote ideas and issues before a wide range of audiences, including senior officials, in such a manner as to ensure program credibility.
Organizational Representation & Liaison	Establishes and maintains relationships with key individuals / groups outside immediate work unit and serves as spokesperson for the organization.
Mission Focus	
DON Mission/Organization	Possesses knowledge of the mission and organization of the DON including an understanding of how the organization fits into the entire DON; understands the roles and responsibilities of each of the major DON claimants and how those roles and responsibilities support the DON mission.
Military Strategy & Policy	Understands the nature of military strategy and the political underpinnings of employing military force.
National Security Strategy	Demonstrates an understanding of and appreciates the thought processes and reasoning behind decisions made in the interest of national security.
Joint Military Operational Planning	Possesses knowledge of the various facets of planning Joint military operations; exhibits understanding of the various roles played by the Armed Services.
Joint Service Perspective	Demonstrates an understanding of the role of the DoD and the importance of the support roles and missions of all the Military Departments and Defense agencies and how they contribute to the success of DoD overall.
Public Safety and Security	Knowledge of the military, weaponry, and intelligence operations, public safety and security operations, occupational health and safety; investigation and inspection techniques; or rules, regulations, precautions, and prevention techniques for the protection of people, data and property.
Porconal Mastory Foots	
Self-direction	Realistically assesses own strengths, weaknesses, and impact on others; seeks feedback from others; works persistently towards a goal; demonstrates self-confidence; invests in self-development; manages own time effectively.

Reasoning	Identifies rules, principles, or relationships that explain facts, data, or other information; analyzes information and makes correct inferences or draws accurate conclusions.
Resilience	Deals calmly and effectively and prevails in stressful situations.
Flexibility	Adapts to change in the work environment; effectively copes with stress.
Ethics/Professionalism	Adheres to all requirements of ethical behavior; demonstrates professional standards of behavior and work ethics; avoids even the appearance of conflict of interest with others.
Honesty/Loyalty	Accepts responsibility for own decisions and actions; admits to and learns from mistakes; follows through on commitments; can be depended upon to tell the truth; actions support the best interests of the DON rather than parochial concerns.
Continual Learning	Continually uses efficient learning techniques to acquire and apply new knowledge and skills; uses training, feedback or other opportunities for self-learning and development.
Attention to Detail	Is thorough when performing work and conscientious about attending to detail. Presents fully staffed work products with recommendations, if needed, on consequence of alternatives.
Technical Competence	Demonstrates technical proficiency and an understanding of its impact in areas of responsibility.
DON Core Values	Exhibits through personal performance the principles of honor (ethical behavior), commitment (technical excellence and quality of work), and courage (mental strength to do what is right).
Memory	Recalls information that has been presented previously.
Mental Visualization	Sees things in the mind by mentally organizing and processing symbols, pictures, graphs, objects, or other information (for example, sees a building from a blueprint, or sees the flow of work activities from a work plan).
Reading	Understands and interprets written material, including technical material, rules, regulations, instructions, reports, charts, graphs, or tables; applies what is learned from written material to specific situations.
Self-Esteem	Believes in own self-worth; maintains a positive view of self and displays a professional image.
Knowledge Focus  Data & Information Management	Shows skill in organizing and controlling the use of data and information; ensures the validity, protection and appropriate use of data and information.
Systems Thinking	Keeps up-to-date with external events and trends influencing decision making at the DON; implements Administration, DON and organizational priorities; fosters working relationships with key external individuals and groups; takes a "big picture" view of problems and issues; understands the organization as a network of interrelated functions; works closely with other organizational functions to accomplish goals.
Integration	Collects, processes and analyzes data and information to form knowledge
Trust	Allows others to rely on them for knowledge based on their integrity, abilities, and/or character.
Collaboration	Works with others, especially in joint intellectual efforts, to increase knowledge for self, coworkers and organization.
Information Sharing	Participates in information sharing and knowledge management initiatives; demonstrates willingness to provide information when requested, anticipates others' needs for information, and acts on information when presented.
Information Patterning	Identifies underlying trends and combinations thereof, and looks for anomalies.
	Ensures the integrity of data, information and knowledge; safeguards
Information Protection	access from unauthorized sources; recognizes the overall value of information as a precious resource.
Information Protection Scanning	access from unauthorized sources; recognizes the overall value of

# **Career Progression Plan (CPP)**

Organizations that already have a form to use for career development, such as an IDP, have the option to continue to use that form, or to use the CPP in this guide. The CPP form is provided in the CPG for those organizations that do not have a similar form available.

Keep in mind that career planning activities do not guarantee promotion or advancement, but do enhance an employee's ability to advance or be promoted. Similarly, filling out an IDP or CPP does not guarantee that an employee will be able to take a course listed, but it will help managers plan and budget for developmental opportunities for their employees.

II T	epartment of the Navy nformation Management/ echnology/Knowledge Ma areer Progression Plan (C	anageme					<b>本等は</b>					
1	NAME (Last, First, Middle)					2. PERIOD FF	2. PERIOD FROM 3. PERIOD TO					
4	POSITION (Title, Series and	d Grade)				5. ORGANIZA	TIONAL CO	DDE				
	P	art I – C	areer Dev	elopm	ent Inf	formation						
Ca	areer Goal:			•								
Aı	nticipated Career Path:											
Le	evel at Full Performance:			Time	Frame to	Full Performance:						
			art II – N		\nalysis							
	Competencies Needing Development	L	earning Obj	ectives		Proposed Deve Activi	Priority					
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	Title / Source		osts		urs	Proposed	Com	ments				
		Tuition & Fees	Travel & Per Diem	On Duty	Off Duty	Dates						
6	EMPLOYEE'S SIGNATURE	7.	DATE	8. S	UPERVI	SOR'S SIGNATURE 9. DATE						
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#### Instructions:

- 1. Name: enter your name (last, first, middle initial,)
- 2. <u>Period From</u>: enter the date for the beginning of assessment period
- 3. <u>Period To</u>: enter the end of assessment period -- usually one calendar year from the beginning of the assessment period
- 4. Position: enter your current position title, series, and grade
- 5. <u>Organizational Code</u>: enter an organizational code, if applicable
- 6. Employee's Signature: sign the completed form
- 7. <u>Date</u>: date the completed form
- 8. Supervisor's Signature: after you sign the form, have your supervisor sign it and date it
- 9. <u>Date</u>: reserved for your supervisor

### Part I - Career Development Information

Career Goal: use this area to document, describe, and/or summarize your career goal.

Anticipated Career Path: describe how you plan to reach your career goal (i.e., will you progress in your current job role or will you gain competencies through work in a different job role?); list potential positions or career areas/job roles.

Level at Full Performance: describe the full performance level (i.e., entry, intermediate, journeyman, senior specialist, executive) needed to fulfill your career goal.

Time Frame to Full Performance: describe the anticipated time frame over which you will be pursuing competencies to fulfill your career goal at the full performance level specified -- this might be months or even years.

## Part II - Needs Analysis

Competencies Needing Development: list the competencies from the KM/IM/IT and career foundational competency assessment matrices identified as having a gap, or "deficiency."

Learning Objectives: list the specific learning objectives for the "deficient" competencies (e.g., all or part of the learning objectives section) -- these can be found on the assessment matrices.

Proposed Developmental Activity: list all proposed developmental activities (learning or work-based) to resolve the listed deficient competencies. Remember that you may suggest developmental activities that do not appear on the assessment matrices.

Priority: prioritize the need for resolving the listed deficient competencies; 1 denotes top priority.

## Part III - Developmental Strategy

Title/Source: list the title/source of each proposed developmental activity from Part II.

Costs: list the cost associated with each proposed developmental activity in terms of tuition and fees, books, and travel and per diem.

Hours: list the hours needed to fulfill each proposed developmental activity in terms of on and off duty.

Proposed Dates: list the proposed dates for each developmental activity; this could include course dates or anticipated work-based experience (such as a detail or project).

Comments: add any illustrative comments.

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# Appendix A: Career Development and Management Checklist

Below is a checklist that can be used to ensure that all of the requisite steps in career development have been completed. It is organized using the PAVE approach discussed earlier in Volume I of the CPG. Check off tasks as you complete them. Page numbers of certain resources are provided for quick reference.

X	Task	Resource	Page	Comments
	Prepare:			
	Read/review CPG	CPG Volume I CPG Volume II	All All	
	Assess:			
	Identify strategic Career Goal and "Future Identity Curve"	CPG Volume I	19	
	Identify path to Career Goal	CPG Volume I	22-24	
	Identify appropriate Career Level	CPG Volume I	25	
	Identify Time Frame to reach Goal	CPG Volume I	26	
	Select current Career Area and Job Role	CPG Volume I CPG Volume II	9-17 All	
	Select target Career Area and Job Role	CPG Volume I CPG Volume II	9-17 All	
	Conduct self-assessment/inventory of:  ◆ Career Foundational Competencies  ◆ KM/IM/IT Competencies	CPG Volume I CPG Volume II	35-43 various	Get manager or mentor involved to validate self assessment.
	Validate:			
	Conduct "needs assessment" of KM/IM/IT competencies needed in target career area/job role; identify gaps	CPG Volume I CPG Volume II	27 various	Get manager or mentor involved to validate needs assessment.
	Conduct "needs assessment" of career foundational competencies; identify gaps	CPG Volume I	27	Get manager or mentor involved to validate needs assessment.
	Determine developmental strategy for KM/IM/IT competencies	CPG Volume I CPG Volume II	28 Various	Consider activities not specifically listed in CPG
	Determine developmental strategy for career foundational competencies	CPG Volume I	28	Consider activities not specifically listed in CPG
	Develop draft Career Progression Plan	CPG Volume I	30	
	Review CPP with manager/mentor	CPG Volume I	30	
	Make changes to CPP and have it signed	CPG Volume I	31	
	Execute:			
	Pursue developmental activities	CPG Volume I	31	
	Conduct Mid-Stream Evaluations	CPG Volume I	32	

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# Appendix B: OPM Draft Job Family Standard for IT Group, GS-2200

The United States Office of Personnel Management (OPM) has issued a draft job family standard for administrative information technology work in a proposed new occupational group, the Information Technology (IT) Group, GS-2200. Organizations within the DON, on an optional basis, may use the parenthetical specialty classification titles issued in the draft standard for official use effective March 30, 2000.

OPM designed the draft standard to cover all positions currently assigned to the Computer Specialist Series, GS-0334, as well as some positions classified in other series (e.g., the Telecommunications Series, GS-0391, and the Miscellaneous Administration and Program Series, GS-0301) where IT knowledge is paramount. The standard includes the establishment of new parenthetical specialty titles that IT experts and job seekers can easily recognize. This new standard is anticipated to take effect by May 2001.

The initial occupation in this job family is *Information Technology Management*, *GS-2210*. The following parenthetical titles are used in addition to the basic title to identify specialty areas and selective qualifications:

- Customer Support
- Data Management
- Information Systems Security
- ❖ Internet
- Network Services
- Policy, Planning and Management
- Software Engineering, Applications
- Software Engineering, Systems
- Systems Analysis
- Systems Administration
- General

The following table is designed to illustrate which career areas and job roles correspond to the various parenthetical titles. While an effort has been made to make this list as accurate as possible, the mapping of parenthetical title to career areas and job roles may be different in unique situations. Please see the Career Areas and Job Roles section for definitions of each CPG job role. In addition, the OPM technical competencies for the Information Technology Specialist are reflected in the competency matrices found in Volume II (Career Areas). Because the CPG competencies largely reflect the inherently governmental nature of work performed in KM/IM/IT, the OPM competencies may be found in multiple CPG job roles or competencies, and mapped either at the competency title or skill topic level.

<b>OPM Parenthetical Title</b>	CPG Career Area	CPG Job Role	
Customer Support	Computer & Information Systems	Systems Administration	
	Engineering		
	Information Management	Learning	
	Telecommunications	Network Operations	
Data Management	Computer & Information Systems	Architecture & Standards	
	Engineering	Data Management	
		Systems Analysis	
	Information Management	E-Business/E-Government	
		Records Management	
	Knowledge Management	Knowledge Systems Engineer	

Information Assurance	Computer Forensics Encryption Information System/Network Securit Information Systems Security
	Information System/Network Securit
	Information Systems Security
	Management
	Policy
	Project Management
	Research & Development
	Risk Management
Knowledge Management	Knowledge Assurance Manager
Computer 9 Information Systems	Architecture & Standards
	Systems Analysis
	Encryption
Information Assurance	Information System/Network Securi
Information Management	E-Business/E-Government
	Knowledge Systems Engineer
Knowledge Wanagement	Knowledge Systems Engineer
Information Assurance	Encryption
Telecommunications	Network Communications
	Network Management
	Policy
	Project Management
	Research & Development
	Network Operations
	Project Management
Information Assurance	Information Assurance Policy
	Project Management
1.6	Risk Management
Information Management	Acquisition Oversight
	Asset Management
	Capital Planning and Investment
	CIO Competency Management
	Competency Management E-Business/E-Government
	Learning
	Manpower Planning
	Performance Assessment
	Process Reengineering and Change
	Management
	Records Management
	Strategic Planning
Knowledge Management	Chief Knowledge Officer
3 3 3 4	Knowledge Manager
Telecommunications	Policy
	Project Management
	Architecture & Standards
Engineering	Project Management
	Software Engineering
	Systems Analysis
	Systems Engineering
Knowledge Management	Test and Evaluation
Nilowieuge ivianagement	Knowledge Systems Engineer
Computer & Information Systems	Architecture & Standards
	Architecture & Standards Project Management
	Project Management
	Software Engineering Systems Analysis
	Systems Engineering
	Systems Engineering
54	
	Computer & Information Systems Engineering Information Assurance  Information Management  Knowledge Management  Telecommunications  Computer & Information Systems Engineering  Knowledge Management  Computer & Information Systems Engineering

OPM Parenthetical Title	CPG Career Area	CPG Job Role
		Test and Evaluation
	Knowledge Management	Knowledge Systems Engineer
Systems Administration	Computer & Information Systems Engineering	Systems Administration
	Telecommunications	Network Operations
Systems Analysis	Computer & Information Systems	Project Management
	Engineering	Systems Analysis
	Knowledge Management	Knowledge Systems Engineer
General	Computer & Information Systems Engineering	Research and Development
	Knowledge Management	Knowledge Process Manager
		Knowledge Transfer Engineer
		Knowledge Research Engineer
		Knowledge Life Cycle Engineer
		Knowledge Community Leader
		Intellectual Capital Manager
		Performance Measurement Engineer
		Knowledge Assistant
	Telecommunications	Network Communications Engineering

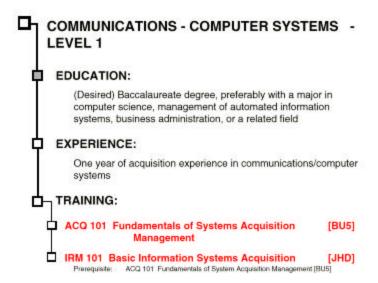
# **Appendix C: Certification Programs**

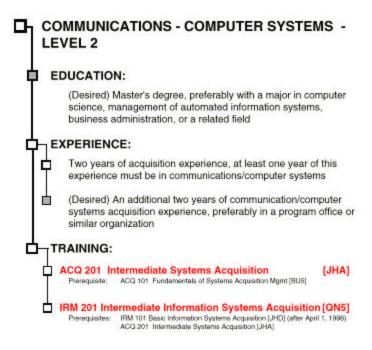
#### **DAWIA Certification**

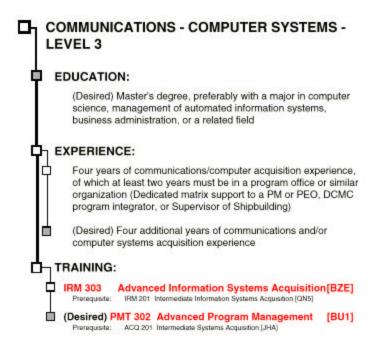
## Certificate Requirements

The following checklists provide a concise description of the education, experience, and training required to meet the standards for certification in the Communications-Computer Systems career field. The checklists have been approved by the Under Secretary of Defense for Acquisition and Technology under the authority of DoD Directive 5000.52, "Defense Acquisition Education, Training, and Career Development Program."

The checklists, one for each of the three levels, include a logic diagram indicating the flow and relational aspects of the standards. Mandatory standards are indicated by an open box, or, when options are available, by an open circle. Individuals may be certified into an acquisition career level when all mandatory standards have been met. Some standards are designated as "desired" and are indicated by shaded boxes and circles. Where no standard exists for an element, the box is filled in black.







It is strongly recommended that you attend the courses in the order listed. These are progressive, sequential courses that build upon previously learned skills in an integrated curriculum. Where knowledge and skills provided in one course are considered essential for participation in another, the prior class is listed as a prerequisite.

## **Course Information and Application Procedures**

See the Defense Acquisition Workforce website (provided below) for course descriptions and instructions on registering for classes.

#### Website

For more information, see <a href="http://www.acg.osd.mil">http://www.acg.osd.mil</a>.

## CIO Certificate Program

## Certificate Requirements

Award of this certificate requires completion of eight 5-day intensive courses, OR the Advanced Management Program (AMP), OR a combination of eight intensive and elective courses [Industrial College of the Armed Forces (ICAF) and National War College (NWC) students only]. Primary courses in six subject areas must be completed. Two of the primary areas must be Policy and Performance and Results-Based Management. The remaining two courses can be selected from either the primary or enrichment offerings for any subject area. Refer to the CIO Course listing for specific offerings.

Graduates of the AMP, a 14-week educational program which provides an integrated perspective of information management, receive credit for the following primary areas: Policy, Information Resources Strategic Planning, Process Improvement, Performance and Results-Based Management, and Acquisition. Additional credits may be earned for electives and the specialty track.

ICAF and NWC students may complete part of the eight course requirement during their academic year by enrolling in selected electives. Remaining requirements may then be met by completing the necessary one-week intensive courses.

Regardless of the approach taken to complete the certificate, participants should confer with their supervisors to determine which subject areas and courses are most critical for their positions and organizations.

From time to time, the IRM College may replace/add/delete courses and/or subject areas. In cases where courses and/or subject areas are dropped, students will receive credit for courses they have already taken while in the program.

Participants will have up to four years from the date of acceptance to complete the program.

## Methodology

The primary teaching methodology is seminar format supplemented by guest speakers. Completion of student assessments is mandatory and may take various forms, from individual papers and projects to team projects and presentations. In some cases, requirements are completed after the formal instruction. In these cases, students have up to three weeks to complete the assignment.

The IRM College conducts all classes on the Ft. McNair campus in Washington, DC. As deemed appropriate, some courses may be taught at remote sites or using a distance learning format.

# **Program Eligibility**

The program is open to federal civilians in the grades of GS/GM 13-15, and military officers in the grades of O5-O6. A bachelor's degree is required. Waivers may be requested for applicants who are no more than one grade lower than minimum requirements. Waivers may also be requested for the degree requirement.

## Application Procedures

Applicants may apply at any time for the intensive course version by submitting a letter of nomination from the supervisor and a CIO Certificate Program Application Form. Individuals requesting a grade or degree waiver must include a request for waiver signed by their supervisor that completely documents why the exception should be considered. Applicants interested in the AMP should consult the Information Resources Management College (IRMC) Home Page for dates, specific application requirements, and fees.

All federal employees may apply for the program; however, DoD students have priority placement in intensive courses. Once individuals are admitted into the program, registration for intensive courses is done through normal procedures using a DD Form 1556 or an SF182.

## Fees

There is no fee for DoD students. Non-DoD federal students pay \$750 (FY99) per intensive course.

#### Website

For more information, see <a href="http://www.ndu.edu/ndu/irmc/cio.html">http://www.ndu.edu/ndu/irmc/cio.html</a>.

# Appendix D: Acronym List

AMP Advanced Management Program
ADL Advanced Distributed Learning
CBT Computer Based Training
CIO Chief Information Officer
CKO Chief Knowledge Officer

CIP Critical Infrastructure Protection
COR Contracting Officer's Representative

CPG Career Path Guide
CPP Career Progression Plan
DAA Designated Approval Authority

DAWIA Defense Acquisition Workforce Improvement Act

DL Distance Learning or Distributed Learning
DLAMP Defense Leadership and Management Program

DON Department of the Navy ERP Enterprise Resource Planning

IA Information Assurance

ICAF Industrial College of the Armed Forces

ICM Intellectual Capital Manager IDP Individual Development Plan

INFOSEC Information Security

IPT Integrated Product/Process Team

IRMC Information Resources Management College

ISD Instructional Systems Design

ISSO Information Systems Security Officer

ITMRA Information Technology Management Reform Act

KM/IM/IT Knowledge Management/Information Management/Information

Technology

LAN Local Area Network
NLN Navy Learning Network
NPS Naval Postgraduate School

NWC Naval War College
OJT On-the-job Training

OPM Office of Personnel Management

QA Quality Assurance RF Radio Frequency

URL Uniform Resource Locator

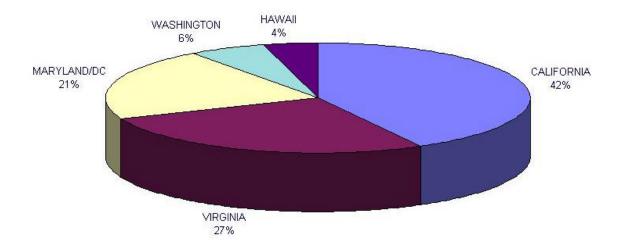
WAN Wide Area Network
WBT Web Based Training

# Appendix E: Demographic Data

The charts below illustrate where the DON IM/IT jobs are with respect to geographic area and claimant. Although it is possible for an employee in an occupational series that is typically considered "outside" of IM/IT to be performing IM/IT related work, for the purposes of the charts, an IM/IT job is considered to be in the following occupational series:

- GS-332 Computer Operator
- ❖ GS-334 Computer Specialist (now GS-2210 IT Management)
- ❖ GS-335 Computer Clerk and Assistant
- ❖ GS-391 Communications Management
- GS-392 General Communications
- ❖ GS-854 Computer Engineer
- ❖ GS-855 Electronics Engineer
- GS-856 Electronics Technician
- ❖ GS-1410 Librarian
- ❖ GS-1411 Library Technician
- GS-1412 Technical Information Services
- GS-1550 Computer Science

This chart shows the distribution of IM/IT jobs in the top five areas of concentration (e.g., where there are a large number of DON IM/IT jobs):



This chart shows the distribution of IM/IT jobs by major DON claimant. The four DON claimants with the largest share of IM/IT jobs are the Naval Sea Systems Command (NAVSEA), Naval Air Systems Command (NAVAIR), Space and Naval Warfare Systems Command (SPAWAR) and the Marine Corps (MARCORPS), respectively. All other DON claimants have been shown together for comparison with the others.

